

REMARKS/ARGUMENTS

Responsive to the Official Action mailed May 20, 2005, applicants have further amended the claims of their application in an earnest effort to place this case in condition for allowance. Specifically, independent claims 1 and 2 have been amended. Reconsideration is respectfully requested.

In the Action, the Examiner has rejected the pending claims under 35 U.S.C. §102, with reliance upon U.S. Patent No. 5,783,503, to Gillespie et al. However, it is respectfully submitted that this reference specifically *teaches away* from applicants' nonwoven compound fabric, as now set forth in the presently pending claims, and accordingly, the Examiner's rejection is respectfully traversed.

As discussed in the Specification, the present invention is directed to medical fabrics with improved barrier performance, which can be very efficiently formed by *direct spinning processes*. Additionally, the present invention contemplates that the recited nano-denier barrier layer be provided in combination with a *secondary barrier layer*, and an associated substrate layer.

As previously noted, this unique combination provides enhanced barrier properties, with the nano-denier barrier layer desirably serving to support the secondary barrier layer structurally in the compound nonwoven fabric. The nano-denier barrier layer provides a smaller average pore size and a larger number of support points for the secondary barrier layer, thus resulting in shorter spans of unsupported secondary barrier material.

Notably, the Gillespie et al. reference is specifically limited in its teachings to employing multi-component thermoplastic filaments such as exemplified by the "segmented pie"

configurations of Figures 1 and 2, or the encapsulation arrangement illustrated in Figure 15. As will be recognized by those familiar with the art, these forms of multi-component filaments must be *specially treated* in order to separate the filaments into their individual elements, thus adding to the complexity of any manufacturing process employing the multi-component filaments.

This is consistent with the disclosure of the Gillespie patent which states:

In another aspect, the invention provides multicomponent thermoplastic continuous filaments that can be split into smaller filaments upon exiting a spinnerette in free fall from this spinnerette, by drawing and stretching or attenuating the filaments in a pressurized gaseous stream, including air or steam, by developing a triboelectric charge in at least one of the components, by application of an external electrical field, or by a combination of some or all of these.

As will be appreciated, formation of the present medical nonwoven compound fabric, including direct spinning of the nano-denier barrier layer, desirably avoids the need to subject multi-component fibers, to which the principal Gillespie et al. reference is limited, to these necessary treatments in order to induce separation of the multi-component fibers into individual components. Not only does the recited direct spinning of the nano-denier barrier layer facilitate manufacture, it additionally assures that the filaments are individualized, maximizing their effectiveness. Clearly, the separation techniques contemplated by Gillespie et al. must be practiced in a sufficiently careful fashion as to assure individualization of the multi-component filaments, thus further complicating formation of fabrics in accordance with the Gillespie et al. teachings.

In view of the foregoing, formal allowance of claims 1 and 2 is believed to be in order and is respectfully solicited. Should the Examiner wish to speak with applicants' attorneys, they may be reached at the number indicated below.

Application No. 10/666,296
Amendment dated September 15, 2005
Reply to Office Action of May 20, 2005

The Commissioner is hereby authorized to charge any additional fees which may be required in connection with this submission to Deposit Account No. 23-0785.

Respectfully submitted,

By 
Stephen D. Geimer, Reg. No. 28,846

WOOD, PHILLIPS, KATZ, CLARK & MORTIMER
500 West Madison Street, Suite 3800
Chicago, Illinois 60661-2511
312/876-1800

September 15, 2005